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	Application No.	Applicant(s)
Notice of Allowability	10/810,309	AKASAKI ET AL.
	Examiner	Art Unit
	Thao X. Le	2814
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. X This communication is responsive to 10/26/05.		
2. X The allowed claim(s) is/are 2,4,6,8,10-13 and 19.		
3. Acknowledgment is made of a claim for foreign priority unally All b) □ Some* c) □ None of the: 1. □ Certified copies of the priority documents have 2. □ Certified copies of the priority documents have 3. □ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: □	been received. been received in Application No cuments have been received in this of this communication to file a reply	national stage application from the
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal	Patent Application (PTO-152)
 Notice of References Cited (PTO-892) Notice of Draftperson's Patent Drawing Review (PTO-948) 	6. ☐ Interview Summar	
	Paper No./Mail Da	
 Information Disclosure Statements (PTO-1449 or PTO/SB/C Paper No./Mail Date 	_	
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	 8. ☑ Examiner's Statem 9. ☐ Other 	ent of Reasons for Allowance

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with the Applicant's Attorney, Mr. B. Shuman, on 21 November 2005. The application has been amended as follows:

In Claim:

- Claim 15 canceled.
- 2. This application is in condition for allowance except for the presence of claims 1, 3, 5, 7, 9, 14, 16, 18, and 20-32 to inventions non-elected without traverse on 06 July 2005. Accordingly, claims 1, 3, 5, 7, 9, 14, 16, 18, 20-32 have been cancelled.
- The following is an examiner's statement of reasons for allowance: Claims 2, 4, 6, 8,10-13, 15 and 19 are allowed because the prior art of record neither anticipated nor rendered obvious all the limitation of the base claim 2 including 'a substrate made of a diboride single crystal expressed by a chemical formula XB_2 , in which X includes at least one of Ti, Zr, Nb, and Hf; wherein an angle θ 1 formed by a normal line of a principal surface of the substrate and a normal line of a (0001) plane of the substrate is $0^{\circ} < \theta 1 \le 0.55^{\circ}$.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao X. Le whose telephone number is (571) 272-1708. The examiner can normally be reached on M-F from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on (571) 272 -1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thao X. Le 16 November 2005

LONG PHAM PRIMARY EXAMINER